

# THE EPISTEMOLOGY OF DARK MATTER AND MODIFIED GRAVITY

**Location:** Historical Archive  
NKUA (45 Skoufa str.)  
**Dates:** 19 – 20 June 2025

## Thursday, 19 June

- 09:15 – 09:30** **Welcome**  
**09:30 – 10:30** **Adán Sus**  
University of Valladolid  
*Rethinking Evidence for Dark Matter: Robust Sources, Gravitational Theory and Physical Principles*
- 10:30 – 11:30** **Olga Mena**  
IFIC, CSIC-University of Valencia  
*Interacting Dark Matter-Dark Energy Cosmologies*
- 11:30 – 12:00** **Coffee Break**  
**12:00 – 13:00** **Simon Allzén**  
University of Stockholm  
*From Particles to Pluralism the Changing Ontology and Epistemology of Dark Matter*
- 13:00 – 14:00** **Siska De Baerdemaeker**  
University of Stockholm  
*Dark Matter Realism Reconsidered*
- 14:00 – 15:30** **Lunch Break (Filion café)**  
**15:30 – 16:15** **George Papadopoulos**  
University of Athens  
*A Bayesian Approach to the Copernican Principle*
- 16:15 – 17:00** **Nikos Alexiou**  
University of Athens  
*In which way can we be realists about dark matter?*
- 17:00 – 17:30** **Coffee Break**
- 17:30 – 18:30** **Emmanuel Saridakis**  
IAASARS, National Observatory of Athens  
*Tensions in Cosmology: Are we approaching a revolution in physics?*

## Friday, 20 June

- 09:30 – 10:30** **Lorenzo Lorenzetti**  
Università della Svizzera italiana  
*Limiting Reduction and Modified Gravity*
- 10:30 – 11:30** **Konstantinos Skordis**  
CEICO, Institute of Physics, CzAS  
*Extensions of General Relativity and cosmological dark matter*
- 11:30 – 12:00** **Coffee Break**  
**12:00 – 13:00** **Rami Jreige**  
École Normale Supérieure  
*Circularity in Dark Matter Detection Experiments*
- 13:00 – 14:00** **Anastasiia Lazutkina**  
University of Wuppertal  
*Evidence in Cosmology: How Galaxies Became Complicated*
- 14:00 – 15:30** **Lunch Break (Filion café)**  
**15:30 – 16:30** **Antonis Antoniou**  
University of Athens  
*Whence the Desire to Close the Universe?*
- 16:30 – 17:00** **Coffee Break**
- 17:00 – 18:00** **Chris Smeenk**  
Western University  
*How do we Measure DM? Let us Count the Ways*

**20:00** **Conference Dinner at “Kiouzin”**

**Address:** Likavittou Str. 16